

## CLAIMS

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1. A digital signal processing system for symmetrical stereophonic image enhancement in an automotive listening environment, comprising:  
input ports receiving stereo input signals from a stereo signal source;  
output ports providing left and right stereo output signals;  
a digital signal process interconnected between the input ports and the output ports, the digital signal process having left and right signal paths and further includes

a phase shift component interposed into one of the left and right signal paths and operative to insert a rapid rate-of-change phase shift to a maximum of 180 degrees into the corresponding stereo signal; and

a time delay component interposed into the remaining signal path and operative to introduce a time delay into the corresponding stereo signal that is equal to the fixed time delay introduced by the phase shift component.

2. The digital signal processing system of Claim 1 wherein the phase shift component is operative to insert the rapid rate-of-change phase shift at substantially 200 Hertz.

3. The digital signal processing system of Claim 1 wherein the phase shift component is operative to insert the rapid rate-of-change phase shift at a frequency within the range of 150 to 300 Hertz.

4. The digital signal processing system of Claim 1 wherein the digital signal process further includes an adjustable clock, such that the frequency of the clock determines the frequency at which rapid rate-of-change phase shift occurs.

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